

**CLAIMS**

1. Thermal transfer ribbon actuation device for printing machines,  
specifically in machines incorporating a thermal printing head (9) established  
on a moving carriage (4) that travels along a fixed plate (3) and above a  
continuous band (1), which advances intermittently and bears the printing  
clusters (2) that define transverse alignments (with respect to the motion of  
the carriage) such as labels, films or the like, and in which said thermal  
printing head (9) employs a thermal transfer ribbon (7) supplied by a cassette  
of origin (5) and collected by a destination cassette (10) that acts as a  
transport mechanism for the ribbon (7), characterised in that the motor (11)  
transporting the aforementioned thermal transfer ribbon (7) is placed at any  
suitable place of the fixed plate (3), this is, out of the carriage (4), transmitting  
its motion directly or indirectly to a drive roller (12) also established on the  
fixed plate (3), which is aided by a return roller (14) also established on the  
fixed plate (3), the two rollers (12) and (14) being connected to each other by  
a transmission mechanism (13), such as a belt, which bends with the aid of a  
pair of auxiliary rollers (16-16'), mounted on the corresponding side of the  
carriage (4), in its path towards a drive roller (15) that is also mounted on the  
carriage (4), which conveys the motion to the destination cassette (10) when  
the thermal printing head (9) is operating, this is, in correspondence with the  
printing clusters established in the continuous band (1).

2. Thermal transfer ribbon actuation device for printing machines,  
according to claim 1, characterised in that the transport roller (15) is mounted  
free to turn on the corresponding wall of the of the carriage (4), and is joined  
to a freely revolving wheel (18) that moves inside an elastomer roller (14),  
arranged axially to it so that when the motor (11) is stopped and the roller  
(15) turns due to the longitudinal movement the carriage (4), its motion is not  
transmitted to the elastomer roller (19), while when the motor (11) is moving  
the free wheel (18) and the elastomer roller (19) engage, conveying a motion  
to the latter.

3. Thermal transfer ribbon actuation device for printing machines,  
according to previous claims, characterised in the elastomer roller (19)

transmits the motion by means of a belt (20) or another suitable means of transmission to the shaft (21) of the drive cassette (10) of the thermal transfer ribbon (7).

- 5                      4. Thermal transfer ribbon actuation device for printing machines, according to claim 3, characterised in that between the gear (22) and the shaft (21) of the drive cassette (10) of the thermal transfer ribbon (7) there is a friction element that compensates the tangential speeds resulting from the varying diameter.